



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/768,331

01/25/2001

Takashi Suzuki

862.C2097

3930

5514

7590

05/15/2006

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

PHAM, THIERRY L

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/768,331

Applicant(s)

SUZUKI ET AL.

Examiner

Thierry L. Pham

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/1/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 12/10/05; 1/30/06
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2625

DETAILED ACTION

- This action is responsive to the following communication: an Amendment filed on 3/1/06.
- Claims 41-56 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 41-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katoh et al (US 5845008), and in view of Abe (US 6580804).

Regarding claim 41, Katoh discloses an apparatus (image processing device for copy machine, fig. 1, col. 11, lines 25-26) for processing image data to prevent the output of copy-prohibited image data (prevent copy-prohibited image from reproducing, col. 3, lines 40-52), said apparatus comprising:

- means for transferring (transferring image data in packets from PC to image forming apparatus is widely known and available in the art, for example, transferring via network such as LAN) image data defining an image in packets such that each packets contains image data for a tile of the image, wherein the image is made up of a plurality of tiles in the length and width directions;
- determination means (pattern detecting devices 1-3 for detecting and determining whether the document contains any confidential patterns, fig. 1, col. 5, lines 40-44) for testing the image data defining the image to determine whether the image data has characteristics of a copy-prohibited image (i.e. banknotes, abstract and col. 7, lines 21-28);
- dividing means (dividing into blocks, i.e. area 45 and 46 as shown in fig. 24, col. 21, lines 9-16) for dividing the image into a plurality of blocks (i.e. four blocks, fig. 36 & 38)

Art Unit: 2625

for testing by said determination means, such that each block includes image data for an integer number of tiles (i.e. plurality of cells, fig. 13, col. 17, lines 31-55 and col. 21, lines 9-17); and

- control means (CPU 30, fig. 7, col. 19, lines 20-32) for generating a control signal to prevent (prohibit copy command will be issued, and the confidential items will not be copied, col. 5, lines 29-31) the output of image data for faithfully reproducing the image, in response to detection of image data having characteristics of a copy-prohibited image (document contains security mark 6, fig. 36) by said determination means, wherein said determination means is arranged to test the blocks generated by said dividing means to determine whether a block has characteristics of a copy-prohibited image.

Katoh teaches a dividing means for dividing image data into plurality of blocks, but fails to teach and/or suggest a dividing means for dividing image data into plurality of blocks based upon a size of characteristics portion of a copy-prohibited image and size of the tile of the image.

Abe, in the same field of endeavor decoding/detecting confidential marks (i.e. watermark), teaches a dividing means (image divider 3, fig. 1) for dividing image data into plurality of blocks (plurality of rectangular blocks, fig. 3-4, col. 3, lines 33-37) based upon a size (col. 4, lines 15-25) of characteristics portion of a copy-prohibited image and size of the tile of the image (col. 7, lines 34-65)

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify an image processing apparatus of Katoh to include a dividing means for dividing image data into plurality of blocks based upon a size of characteristics portion of a copy-prohibited image and size of the tile of the image as taught by Abe because of a following reason: (•) to accurately determine and prevent digital watermarks from being copied even if only a portion of digital watermark is being copied (col. 6, lines 33-42 of Abe).

Therefore, it would have been obvious to combine Katoh with Abe to obtain the invention as specified in claim 41.

Art Unit: 2625

Regarding claim 42, Katoh further discloses an apparatus according to claim 41, wherein said apparatus further comprises image processing means (i.e. color processing circuit 56, fig. 27, col. 22, lines 4-16) responsive to the control signal to execute predetermined processing (i.e. making the entire screen go black and or signal prohibiting copy of confidential marks, col. 22, lines 4-16) of the image data determined by said determination means to have characteristics of a copy-prohibited image, wherein said control means is operable to generate the control signal to control said image processing means.

Regarding claim 43, Katoh further discloses an apparatus according to claim 42, wherein said image processing means is responsive to the control signal to change the density or brightness of the image data (varying confidential marks density and/or resolution, fig. 21, col. 20, lines 30-46).

Regarding claim 44, Katoh further discloses an apparatus according to claim 42, wherein said image processing means is responsive to the control signal to erase (col. 15, lines 25-28) the image data.

Regarding claim 45, Katoh further disclose an apparatus according to claim 41, wherein said determination means is operable to test the image data of a block (i.e. plurality of blocks figs. 36 & 38) to determine whether the image data has characteristics of a copy-prohibited image by testing the image data to determine whether it contains a digital watermark (watermark 6, fig. 36).

Regarding claim 46, Katoh further discloses an apparatus according to claim 41, wherein said apparatus further comprises thinning means for thinning the image data defining the image to generate a low-resolution image (reduce resolution, col. 4, lines 18-24 and col. 4, lines 60-67), and said dividing means is arranged to divide the low-resolution image to generate the plurality of blocks (partition into plurality of cells, col. 6, lines 20-25).

Art Unit: 2625

Regarding claim 47, Katoh further discloses an apparatus according to claim 46, wherein said determination means comprises means to test the blocks of low-resolution data to detect the position (position detecting unit 25 for detecting position coordinates of pattern detected, fig. 9, col. 7, lines 30-35 and col. 15, lines 55-56) of image data potentially having characteristics of a copy-prohibited image; extract (extract via extracting device 2, fig. 1) at least one block of original-resolution image data on the basis of the detected position, and test (test whether the documents contain any confidential marks, col. 8, lines 38-45) the extracted at least one block of original-resolution image data to determine whether the at least one block has characteristics of a copy-prohibited image.

Regarding claims 48-54: Claims 48-54 are the methods corresponding the apparatus and recite limitations that are similar and in the same scope of invention as to those in claims 41-47; therefore, claims 48-54 are rejected for the same rejection rationale/basis as described in claims 41-47 above.

Regarding claims 55-56: Claims 55-56 recite limitations that are similar and in the same scope of invention as to those in claims 48 except computer readable memory for storing computer programs. All computers/printers have some type of computer readable medium (i.e. memory 20, fig. 7 of Katoh) for storing computer programs, hence claims 55-56 would be rejected using the same rationale as in claims 48.

Response to Arguments

Applicant's arguments with respect to claim 41 have been considered but are moot in view of the new ground(s) of rejection due to newly added features.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2625

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham



GABRIEL GARCIA
PRIMABRIEL GARCIA
PRIMARY EXAMINER